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(12) United States Patent

Schembre et al.

(54) ENDOSCOPIC ULTRASOUND-GUIDED NOTCHED BIOPSY NEEDLE

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See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

4,055,167 A 10/1977 Bernstein 4,249,541 A * 2/1981 Pratt A61B 10/0283 600/566

(Continued)

FOREIGN PATENT DOCUMENTS

CN 2449657 Y 9/2001 WO WO 03/079907 A1 10/2003

OTHER PUBLICATIONS

Chhieng, David C. et al., "Fine-Needle Aspiration Cytology of Hodgkin Disease," Cancer Cytopathology, 2001, American Cancer Society, pp. 52-59.

(Continued)

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(57) ABSTRACT

A notched tissue-collection needle configured similarly to a fine-needle-aspiration needle is provided with a cutting edge disposed in the notch and configured to excise tissue into the notch for collection. A stylet may be provided through a lumen of the needle during introduction into a patient body. The needle may be provided with echogenicity-enhancing features.

17 Claims, 3 Drawing Sheets

